Application Number: T2-00003 **Scientific Score**: 80

Title: [redacted] CIRM Scholar Program

Specific names of individuals and institutions are blacked out to preserve applicant confidentiality where possible.

Proposal Abstract as Submitted by Applicant

The [redacted] CIRM Scholars Training Program will train CIRM scholars in the postdoctoral and clinical tracks. [redacted] conducts basic research on three of the most important medical problems of modern times: cardiovascular disease, AIDS, and neurodegenerative disorders. Each of these research areas addresses promising targets for regenerative medicine. [redacted] recently consolidated its research activities in a new 200,000 sq. ft. facility, including laboratory space constructed without federal funding. Its location—adjacent to [redacted] —provides an ideal environment for [redacted] CIRM scholars to collaborate with leading researchers at [redacted] and in neighboring [redacted] laboratories. The [redacted] program features two key mentors outside of [redacted]: [redacted] and [redacted]. [redacted] is an independent research institute affiliated with [redacted], and we are combining some of our educational activities with the robust training programs in stem cell biology at [redacted], [redacted], and [redacted], thus facilitating synergy and eliminating duplication (as allowed in the RFA). [redacted] offers a unique training for CIRM scholars, providing a commitment to educating the next generation of biomedical scientists, highly interactive research groups, and substantial individual feedback from experienced mentors. More than 300 fellows have trained at [redacted]. In a national survey by The Scientist, [redacted] was rated as the 12th best place for postdoctoral scientists to work in the U.S. in 2005 (123 universities/institutions were ranked). The [redacted] CIRM Scholars Training Program will allow us to enhance our research program to help meet the goals of regenerative medicine, while at the same time enhancing the training of young scientists.

Benefit of this Program to California

This program will benefit the people and the state of California by providing high-quality training in the scientific, clinical, social, and ethical aspects of stem cell research to the scientists and clinicians who will develop and apply future therapies in this rapidly emerging field.

Summary of Review

This application proposes a type II training program for post-doctoral and clinical trainees in three primary areas of research that include cardiovascular disease, neurodegenerative disease, and hematopoietic stem cells. The educational program will leverage an affiliated institution’s course curriculum (that includes the required stem-cell biology and ethics courses) to minimize duplication and facilitate synergies. The objectives and design of the training program are well described and laid out. The clinical focus of two of the three areas of research could add an important translational element, but the application does not discuss how that would be accomplished. Leadership is very strong in the area of post-doctoral education and research administration. The program

director has impressive qualifications having published high quality work. The associate director is also an outstanding scientist and experienced administrator. An executive committee that includes the directors will meet quarterly to assess overall progress. All of the proposed mentors are impressive and extremely complementary in skills and area of expertise, which will expose trainees to a variety of powerful approaches in regenerative medicine. However, only two mentors are directly working with stem cells or progenitors. Formal mentoring programs are built into the institution's curriculum and include courses in career development and management. The applicant pool is expected to be very good given the quality of mentors and the institution. The overall training environment is excellent and includes available space (without NIH funding) for use on human ES cell lines. A weakness of the application is that it did not clearly present what stem cell research is on-going nor what specific training in stem-cell biology will be offered to the trainees.

Overall Strengths and Weaknesses

This application presents a strong proposal for a post-doctoral and clinical training program in stem cell biology. An incredibly gifted and productive team of investigators and the institution's history of successfully training post-doctoral scholars compensate what lacks in the specific description on proposed training and coursework.

Recommendations

Highly meritorious and recommended for funding.

	Pre	Post	Clinical	Total
Fellows Requested:	0	7	3	10
Fellows Recommended:	0	7	3	10

	Year 1	Total
Budget Requested:	$ 799,080	$ 2,397,240
Budget Recommended:	$ 799,080	$ 2,397,240